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28 August 2007

Ms. Beth Gordon RESCOM Environmental PO Box 6225 Traverse City, Michigan 49696

RE: Biological Study and Impact Assessment of the Proposed Cricket Communications Telecommunications Facility (SAN-227-A) on the Black Mountain Norte Tank Property, San Diego, California

Dear Ms. Gordon,

The following letter report details the results of the biological study and impact assessment of the proposed Cricket Communications (Cricket) telecommunications facility (SAN-227-A) on the Black Mountain Norte Tank property, located at 16893 Camino San Bernardo in San Diego, California.

#### **SUMMARY**

**Purpose and Scope:** RESCOM Environmental Corp (RESCOM) retained SWCA Environmental Consultants (SWCA) to undertake a biological resources study of the proposed Cricket Communications SAN-227-A telecommunications facility on the Black Mountain Norte Tank property in San Diego, California. The work was requested to fulfill requirements set forth in the San Diego Multiple Species Conservation Plan (MSCP) and the California Environmental Quality Act (CEQA), as required by the County of San Diego. The services provided by SWCA entailed a sensitive species occurrence database review and a field visit of the approximately 3.0-acre project area to determine if sensitive biological resources are present on the property or its immediate vicinity, and to determine whether implementation of the project would result in significant impacts to sensitive biological resources. This report documents the results of the study.

**Dates of Investigation:** The sensitive species database search was conducted prior to entering the field, and the field visit was conducted on July 30, 2007. This report was completed in August 2007.

Findings of the Investigation: The sensitive occurrence database search revealed the presence of more than 1,220 occurrences of 131 special-status species or habitats within the nine 7.5-minute U.S. Geologic Survey (USGS) topographic quadrangles surrounding the project area. The field visit identified one special-status species within the study area, coastal California gnatcatcher. Additionally, several other special-status species may occur immediately adjacent to the project area, including orange-throated whiptail, coast horned lizard, northern red-diamond rattlesnake, southern California rufous-crowned sparrow, Bell's sage sparrow, San Diego cactus wren, Dulzura pocket mouse, northwestern San Diego pocket mouse, and San Diego black-tailed jackrabbit.

The proposed project would not result in impacts to special-status plants, or the take of sensitive habitats within the hardline preserve, nor would potentially jurisdictional wetlands be impacted by the proposed project. The proposed project has the potential to impact nesting pairs of migratory, raptorial, and native avian species. The trenching associated with the proposed buried utility easement could result in inadvertent trapping of terrestrial animals, including special-status reptilian and mammalian species, within the open trench during its construction.

Recommendations: In order to reduce potential project impacts to a less than significant level, SWCA recommends the following: (1) construction of the project should be conducted outside of the nesting season for protected avian species, or between September 1<sup>st</sup> and January 14<sup>th</sup>; (2) if construction must occur during the nesting season for birds, or between January 15<sup>th</sup> and August 31<sup>st</sup>, a qualified biologist should perform preconstruction nest surveys to identify active nests within and adjacent to the project area; (3) if active nests are discovered during the preconstruction survey, the biologist should mark buffer zones of 300 feet around active non-raptor nests and 500 feet around active raptor nests, and these buffers should be avoided during construction; (4) a temporary fence such as silt fencing should be placed along the edge of the construction limits adjacent to coastal sage scrub and grassland habitats during construction to serve as a limit line for equipment operators, as well as an obstacle for animals traversing the area; and (5) if the trench associated with the proposed utility easement is to remain open for more than one day, it is recommended that a qualified biologist monitor the trench for the presence of reptiles, amphibians, or rodents that may have become trapped in the trench overnight prior to the commencement of work the following day.

#### INTRODUCTION

#### PURPOSE OF ASSESSMENT

This document details the results of a biological study of the proposed SAN-227-A telecommunications facility on the Black Mountain Norte Tank property (project), located within and adjacent to property owned by the Olivenhain Water District at 16893 Camino San Bernardo, San Diego, San Diego County, California. The purpose of the study was to assess the project area for its potential to support sensitive biological resources, including special-status species or sensitive habitats. SWCA Environmental Consultants (SWCA) was contracted by RESCOM Environmental Corp (RESCOM) to provide these biological services in support of the project, which is being proposed by Cricket Communications.

The biological study included database searches and a field survey to ascertain which sensitive biological resources occur, or have the potential to occur, within the project area and its vicinity. The field visit consisted of evaluating the project area for its potential to support sensitive plant and wildlife species, and vegetation mapping. This information is used in the final section of this report in a discussion of potential project-related impacts to special-status species and/or habitats.

#### **PROJECT DESCRIPTION**

Cricket Communications proposes to install an unmanned telecommunications facility. The facility will consist of three antennas and associated equipment cabinets. Three sectors of antennas will be mounted on the existing Black Mountain Norte Tank structure. Associated antenna cables and cable trays will extend from the antennas to a proposed ground-mounted equipment cabinet, and one wall-mounted utility cabinet, built on a concrete slab located approximately 25 feet southeast of the existing water tank. An access and utility easement will be located along an existing access road that extends from Camino San Bernardo to the existing tank structure. Utilities will be installed below the surface of the easement, and

will tie in to utility vaults located beneath Camino San Bernardo. The entire footprint of the proposed project occurs over 3.0 acres, and includes the existing water tank, existing access easement, and existing developed or disturbed pads associated with the water tank. The project footprint and construction activities associated with implementation of the project (trenching, etc.) will be confined to previously disturbed and developed areas in the vicinity of the existing water tank and its access easement.

#### **PROJECT LOCATION**

The project is located within the County of San Diego just outside the San Diego Corporate Boundary, situated south of Lake Hodges and west of Interstate 15 at 16893 Camino San Bernardo. The project area is situated at an elevation of approximately 800 feet (245 meters), located in Township 13 South, Range 2 West, Section 28 of the Escondido 7.5-Minute U.S. Geologic Survey (USGS) topographic quadrangle at Latitude 38°39.036N and Longitude 121°11.052W (Attachment 1).

#### **PROJECT SETTING**

The Black Mountain Norte Tank is situated on a ridge top, with slopes extending to the northeast and southwest. The existing blacktop access road to the tank extends from Camino San Bernardo northwest of the tank, and is situated along the northeast-facing slope to the parcel containing the water tank. The parcel surrounding the Olivenhain Water District parcel is undeveloped. This parcel (APN 678-242-1100) is bound on the northwest by Camino Del Norte, on the northwest by Camino San Bernardo, on the south by Bernardo Center Drive, and on the west and east by large housing developments. Open space is located south of the project area across from Bernardo Center Drive.

SWCA conducted a site visit to the project area on July 30, 2007 to record the biological conditions within and adjacent to the project area. Vegetation within the Olivenhain Water District parcel consists primarily of ornamental landscaping and ruderal vegetation in disturbed areas. Native coastal scrub vegetation occurs over most of the surrounding parcel (APN 678-242-1100). A non-native grassland occurs over an area northwest of the existing water tank, also on the surrounding parcel. The area of the access road tie-in with Camino San Bernardo is vegetated with ornamental landscaping. Further details regarding the vegetation communities within and adjacent to the project area are presented in the following section of this report.

Soils on the majority of the project area, including the top of the ridge, consist of San Miguel-Exchequer rocky silt loams. These soils consist of moderately well drained loams with a silty clay subsoil, developed in metavolcanic material. At the northern end of the project area, where the access road meets with Camino San Bernardo, the soils consist of Diablo-Olivenhain clay loam. These soils are well-drained, moderately deep clay loams derived from calcareous sandstone and shale (Bowman et al. 1973).

The project area and the surrounding parcel are located within the hardline preserve within the unincorporated Lake Hodges segment of the San Diego County Multiple Species Conservation Program (MSCP) (Attachment 2). The MSCP includes prescribed compensation guidelines, conservation strategies, and minimization measures to mitigate for potential project impacts to sensitive species and their habitats and is pursuant to the federal and California Endangered Species Acts and the California Natural Community Conservation Planning Act. Rather than focusing efforts on individual species, the MSCP is designed to preserve native habitat for multiple species. This approach allows for preservation of entire ecosystems (e.g., coastal sage scrub) on a large scale, rather than a single species, project-by-project basis as under the original state and federal species protection laws. Within the MSCP, development is limited to ensure the long-term viability and recovery of 85 "covered" species. Through

this strategy, the MSCP preserves a network of habitat and open space, protecting biodiversity and providing an economic benefit by streamlining compliance with federal and state wildlife laws.

#### HABITATS/VEGETATION COMMUNITIES

#### **METHODS**

#### Field Visit

SWCA conducted a field visit of the project area, which consisted of a reconnaissance-level survey, to identify and map vegetation types within and adjacent to the project area.

#### **Vegetation Mapping**

SWCA conducted a reconnaissance-level survey for vegetation mapping. During the field visit the study area was walked, and plant communities were mapped. The purpose of this survey was to identify vegetation and land cover types and to identify habitats with the potential to support special-status plants and wildlife.

Vegetation types and land cover types were recorded on aerial photographs and described in field notes. Vegetation communities were defined based on dominant species present and classified using descriptions provided by Holland (1986) and Oberbauer (1996). Dominant species are those that attain 50 percent cover or more or, for two or more species to be considered co-dominant, individual species that attain a minimum of 20 percent cover. Percent cover was visually estimated based on the proportion of ground, expressed as a percentage, which was covered by the canopy of individual species. Plant nomenclature followed *The Jepson Manual of Higher Plants of California* (Hickman 1993).

Wildlife habitats corresponded to the recorded vegetation types, but were modified somewhat to correspond to habitat types described in the California Wildlife Habitat Relationships System (CDFG 1988). While vegetation types were defined by plant species composition, wildlife habitats include other important physical environmental characteristics such as rock outcrops and open water. In some cases, a wildlife habitat type may include more than one vegetation type where these types provide similar habitat characteristics and support a similar assemblage of wildlife species.

#### RESULTS

The reconnaissance field survey was conducted by SWCA biologist Lauren Seckel on July 30, 2007. Conditions at the project during the survey are detailed below. The field visit consisted of vegetation mapping of the project area and adjacent parcel, assessing habitat within and adjacent to the project area for its potential to support sensitive species, and searching for sensitive plant and wildlife species.

Biologists	Time and date	Conditions
Lauren Seckel	11:30 – 2:45 p.m.	Clear, breezy (7 mph), warm
	30 July 2007	$(22^{\circ} C)$

#### **Vegetation Mapping**

The conditions that occurred within and adjacent to the project area included: (1) a paved access road and cement pad surrounding the existing water tank that was bordered by ruderal vegetation and landscaped

areas; (2) coastal sage scrub on the hillsides to the north, east, and south of the project area; and (3) a non-native grassland to the northwest (Attachment 3).

The coastal sage scrub occurring over the majority of the undeveloped parcel adjacent to the project area is characterized as Diegan Coastal Sage Scrub (Holland [1986] Element Code 32500). Coastal sage scrub provides habitat for several endangered and threatened species and is listed as a Tier II vegetation in the San Diego MSCP. This vegetative community is dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fascilulatum*), and laurel sumac (*Malosma laurina*). Other species observed in this community include coyotebrush (*Baccharis pilularis*) and the non-natives rip-gut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), artichoke thistle (*Cynara cardunculus*), and sweet fennel (*Foeniculum vulgare*). Wildlife species observed within the coastal sage scrub included coastal California gnatcatcher (*Polioptila californica californica*), western kingbird (*Tyrannus verticalis*), California towhee (*Pipilo crissalis*), house finch (*Carpodacus mexicanus*), and American kestrel (*Falco sparverius*). The coastal California gnatcatcher is listed as federally threatened and is covered by the MSCP, and is discussed further below. Although coastal sage scrub covers much of the immediately adjacent land within the MSCP hardline preserve, this habitat type does not occur within the project area.

Northwest of the existing tank and immediately adjacent to the project area, the vegetation community is characteristic of Non-native Grassland (Holland [1986] Element Code 42200). Non-native grassland provides habitat for nesting birds and is listed as a Tier III vegetation in the San Diego MSCP. This vegetation community is dominated by red brome and black mustard (*Brassica nigra*). Also present were rip-gut brome, coyotebrush, and California buckwheat. Although no wildlife species were directly observed in this habitat, several rodent burrows were noted. This habitat may provide nesting habitat for ground-nesting avian species, and foraging habitat for many wildlife species, including special-status wildlife. Although non-native grassland occurs on immediately adjacent land within the MSCP hardline preserve, this habitat type does not occur within the project area.

Large portions of the project area have previously been developed, including the existing water tank, the existing access easement, and a concrete pad associated with the water tank. Several areas immediately adjacent to the developed areas are better characterized as disturbed, and include gravel or dirt lots adjacent to the water tank, access easement, and concrete pads. These habitat types can be characterized as both Developed (Oberbauer [1996] Code 12000) and Disturbed Habitat (Oberbauer [1996] Code 11300). Both habitat types are listed as a Tier IV vegetation in the San Diego MSCP. The Developed area includes the paved access easement, the existing water tank, and the concrete pad immediately surrounding the water tank. The area classified as Disturbed Habitat can be described as a narrow buffer zone around the Developed area. It includes a narrow unpaved strip of land immediately adjacent to and on either side of the access road, and dirt and gravel covered areas surrounding the water tower's cement pad. Weedy, ruderal species were evident in the disturbed areas, including Russian thistle (Salsola tragus), sour clover (Melilotus indica), black mustard, soft brome (Bromus hordeaceus), rip-gut brome, red brome, redstem filaree (Erodium cicutarium), and tocolote (Centaurea melitensis). The areas of disturbed habitat contain limited native vegetation. Within the disturbed habitat, wildlife species observed included house finch and northern mockingbird (Mimus polyglottus). Developed areas within the project area account for most of the acreage – 2.2 acres. Disturbed areas account for 0.4 acres within the project area.

Landscaped areas occurred in the area surrounding the water tank, and along Camino San Bernardo at the tie-in with the access road. The landscaped areas contained non-native ornamental vegetation, including eucalyptus (*Eucalyptus* sp.), oleander (*Nerium oleander*), acacia (*Acacia* sp.), and gazania (*Gazania rigens*). Weedy vegetation had invaded the landscaped areas, including tree tobacco (*Nicotiana glauca*), red brome, rip-gut brome, and bermuda grass (*Cynodon dactylon*), among others. Wildlife species

observed within the landscaped areas included rock dove (*Columba livia*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Carduelis psaltria*), California towhee, and house finch. Though no nests were observed, the larger eucalyptus trees immediately adjacent to the existing water tank have the potential to provide nesting habitat for raptors. Landscaped areas covered 0.4 acres within the project area.

#### **Survey Limitations**

The survey of the property was limited only by the time of year in which it was conducted. Because the survey was conducted in at the end of July during a particularly dry summer, floral resources, particularly annual and perennial plants that may have prematurely senesced or were under extreme drought stress, may not have been visible.

#### SPECIAL STATUS SPECIES

#### **METHODS**

#### **Literature Search**

SWCA reviewed existing sources of information regarding occurrences of special-status species and assessed the potential for occurrence of these species within the project area. Special-status species are plants and animals in one or more of the following categories:

- Species listed or proposed for listing as threatened or endangered under FESA (50 CFR 17.12 [listed plants], 50 CFR 17.11 [listed animals], and various notices in the Federal Register [FR] [proposed species]).
- Species that are candidates for possible future listing as threatened or endangered under ESA (67 FR 40657, June 13, 2002).
- Species listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations 670.5).
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380).
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).
- Plants considered by the CNPS to be "rare, threatened, or endangered in California" (Lists 1B and 2 in California Native Plant Society 2001).
- Plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in California Native Plant Society 2001), which may be included as special-status species on the basis of local significance or recent biological information.
- Animal species of special-concern as listed by CDFG (2006).
- Animals fully protected in California (California Fish and Game Code Sections 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]).
- Species that are "covered" under the San Diego County MSCP, including listed species, "Narrow Endemic Species," or other sensitive species.

The following sources of information were consulted before conducting the field survey:

- The California Natural Diversity Database (CNDDB) (2007) for the Escondido U.S. Geological Survey 7.5-Minute Quadrangle (USGS Quad) and eight surrounding quadrangles in the project vicinity including: San Marcos, Rodriguez Mountain, Rancho Santa Fe, San Pasqual, Del Mar, Poway, and San Vicente Reservoir; accessed July 18, 2007.
- CNPS 2007 online Inventory of Rare and Endangered Plants of California for the Escondido U.S. Geological Survey 7.5-Minute Quadrangle (USGS Quad) and eight surrounding quadrangles in the project vicinity including: San Marcos, Rodriguez Mountain, Rancho Santa Fe, San Pasqual, Del Mar, Poway, and San Vicente Reservoir; accessed July 18, 2007.
- U.S. Fish and Wildlife Service, Carlsbad Fish & Wildlife Office Endangered and Threatened Species List (San Diego County); accessed July 18, 2007.

#### **Field Survey**

Concurrent with vegetation mapping of the project area and adjacent lands, SWCA conducted a reconnaissance-level survey for the purpose of identifying special-status plants and wildlife, including MSCP-covered species, and to determine the potential for special-status plant and wildlife species to occur within habitats on and adjacent to the project area. All plant species observed during the survey were identified to species or further using taxonomic nomenclature provided in *The Jepson Manual of Higher Plants of California* (Hickman 1993). Wildlife species were recorded during survey of the study area and were detected by sight and sound. Visual identification was aided by 10.5 x 43 binoculars. Wildlife habitats were also assessed within the study area. Special attention was given to the potential for nesting bird species, including raptors, that could nest within and adjacent to the study area. All species were identified to the lowest possible taxonomic level. No nocturnal or protocol-level surveys were conducted.

#### **Sensitive Species Assessment**

Following the database searches and field survey, SWCA assessed of the potential for occurrence for other special-status species not covered under the MSCP. This consisted of assessing the biological conditions within the project area and the known occurrences of special-status species within the project's vicinity. During the assessment, each species was assigned to one of the following categories:

**Present**: Species is known to occur within the project area, based on recent records, and/or was observed onsite during the field survey.

**May occur**: Species is known to occur within the vicinity of the project area (within five miles), and there is suitable habitat within the project area.

**Not likely to occur**: Species is known to occur in the vicinity of the project area (within five miles); however, there is poor quality or marginal habitat in the project area. Alternatively, there is suitable habitat in the project area; however, there are no records or only historic records within five miles, and the species was not observed during surveys. If the species occurs at the project area, it would likely be as a migrant, and the species is not likely to reproduce (breed or nest) within the project area due to a lack of suitable habitat or because the project area is outside of their known breeding range.

**Absent**: Species is not known to occur in or in the vicinity of the project area, and/or there is no suitable habitat for the species within the project area. Alternatively, a species was surveyed for during the appropriate season with negative results for species occurrence.

#### **RESULTS**

#### **Field Survey**

Plant and wildlife species observed during the field visit are presented in Attachments 4 and 5. Most of the species observed are commonly occurring species. However, one sensitive species, coastal California gnatcatcher, was observed within the coastal sage scrub habitat immediately adjacent to the project area. The observation of this species is discussed in the next section. The CNDDB Field Survey Form is presented in Attachment 6.

#### **Sensitive Species and Habitat Assessment**

Attachment 7 provides a list of all special-status plant and wildlife species identified by the literature search as having the potential to occur in the vicinity of the project area. It also provides a description of typical habitat requirements, legal status, and an evaluation of the potential of occurrence within the project area. Attachment 8 provides a map of special-status species occurrences within five miles of the project area. Below, we provide expanded descriptions for those species that were either present within the project area, or their occurrence potential was evaluated as "may occur" within the project area.

#### **Special-status Plants**

During the field survey, habitats capable of supporting special-status plant species were evaluated within the project area. Based on the analysis provided in Attachment 7, the following species were eliminated from further consideration because 1) there is no suitable habitat within the project area AND there are no local records (within five miles) in the vicinity of the project area, and/or 2) the project area is outside of their known range. Alternatively, although there are records of these species within the project's vicinity (within 5 miles), there is no suitable habitat within the project area to support the occurrence of these species. These species were assessed as "absent:"

- Shaw's agave
- Aphanisma
- Rainbow manzanita
- San Diego milk-vetch
- Coastal dunes milk-vetch
- South coast saltscale
- Parish's brittlescale
- Golden-spined cereus
- Orcutt's brodiaea
- Lakeside ceanothus
- Southern tarplant
- Orcutt's pincushion

- Long-spined spineflower
- Sea dahlia
- San Diego sand aster
- Del Mar Mesa sand aster
- Short-leaved dudleya
- Hoover's button-celery
- San Diego button-celery
- Campbell's liverwort
- Mission Canyon bluecup
- San Diego gumplant
- Ramona horkelia
- San Diego marsh-elder
- Coulter's goldfields
- Heart-leaved pitcher sage
- Nuttall's lotus
- Felt-leaved monardella
- Willowy monardella
- Little mousetail
- Spreading navarretia
- Coast woolly-heads
- Gander's ragwort
- Torrey pine
- San Diego mesa mint
- Otay Mesa mint
- Rayless ragwort
- Estuary seablite

Based on the analysis provided in Attachment 7, the following species were eliminated from further consideration either because: 1) although appropriate habitat was identified within the project area, there are no recent local records of their occurrence, as determined through the CNDDB, OR 2) although there are recent local records of their occurrence within the vicinity of the project area, habitat within the project area was determined to be to be marginal, limited, or otherwise unfavorable. These species were assessed as "not likely to occur:"

- San Diego thornmint
- California adolphia
- San Diego ambrosia
- Del Mar manzanita
- Encinitas baccharis
- Thread-leaved brodiaea
- White coast ceanothus

- Smooth tarplant
- Orcutt's spineflower
- Delicate clarkia
- Summer holly
- Variegated dudleya
- Sticky dudleya
- Palmer's goldenbush
- Cliff spurge
- San Diego barrel cactus
- Orcutt's hazardia
- Decumbent goldenbush
- Robinson's peppergrass
- San Diego goldenstar
- Snake cholla
- Nuttall's scrub oak
- San Miguel savory
- Bottle liverwort
- Purple stemodia
- Parry's tetracoccus
- Coastal triquetrella

#### **Special Status Wildlife**

During the field survey, habitats capable of supporting special-status wildlife species were evaluated within the project area. Based on the analysis provided in Attachment 7, the following species were eliminated from further consideration because 1) there is no suitable habitat within the project area AND there are no local records (within five miles) in the vicinity of the project area, and/or 2) the project area is outside of their known range. Alternatively, there are records of these species within the project's vicinity (within 5 miles), there is no suitable habitat within the project area to support the occurrence of these species. These species were assessed as "absent:"

- San Diego fairy shrimp
- Sandy beach tiger beetle
- Tiger beetle
- Globose dune beetle
- California melitta bee
- Riverside fairy shrimp
- Mimic tryonia
- Arroyo toad
- Western spadefoot
- Western pond turtle
- Two-striped garter snake

- Tricolored blackbird
- Golden eagle
- Western snowy plover
- Southwestern willow flycatcher
- Yellow-breasted chat
- California black rail
- Belding's savannah sparrow
- White-faced ibis
- Light-footed clapper rail
- California least tern
- Least Bell's vireo
- Spotted bat
- Big free-tailed bat
- Pacific pocket mouse

Based on the analysis provided in Attachment 7, the following species were eliminated from further consideration either because: 1) although appropriate habitat was identified within the project area, there are no recent local records of their occurrence, as determined through the CNDDB, OR 2) although there are recent local records of their occurrence within the vicinity of the project area, habitat within the project area was determined to be to be marginal, limited, or otherwise unfavorable. Alternatively, species may have been eliminated from further consideration because, 1) they would use the project area only as a migrant; OR 2) while they may occasionally use the project area for foraging, they are not likely to be resident or reproduce there due to a lack of appropriate habitat or because the project area is outside of their known breeding range; OR 3) the site does not likely provide suitable habitat for a sustaining population of this species. These species were assessed as "not likely to occur:"

- Monarch butterfly
- Coastal western whiptail
- Rosy boa
- San Diego ringneck snake
- Coronado skink
- Coast patch-nosed snake
- Cooper's hawk
- Burrowing owl
- White-tailed kite
- California horned lark
- Pallid bat
- Mexican long-tongued bat
- Stephan's kangaroo rat
- California mastiff bat
- Western yellow bat
- San Diego desert woodrat

- Pocketed free-tailed bat
- American badger

Based on the analysis provided in Attachment 7, the following species have either been observed within the project area, or their occurrence potential was assessed as "may occur" within the project area due to the presence of suitable habitat and known local records in the project's vicinity. Brief species accounts for the following species are provided below:

- Orange-throated whiptail
- Northern red-diamond rattlesnake
- Coast horned lizard
- Southern California rufous-crowned sparrow
- Bell's sage sparrow
- San Diego cactus wren
- Coastal California gnatcatcher
- Dulzura pocket mouse
- Northwestern San Diego pocket mouse
- San Diego black-tailed jackrabbit

#### **Orange-throated Whiptail**

The orange-throated whiptail (*Aspidoscelis hyperythra*) is covered under the MSCP and is listed as a California Species of Special Concern. The County lists it as a Group 2 species. There are eleven occurrences of this species within five miles of the project area (Attachment 8). This species inhabits open grassland, coastal scrub, and chaparral. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area. Individuals of this species may traverse the project area to access suitable habitat, such as crossing the access easement.

#### Northern Red-diamond Rattlesnake

The northern red-diamond rattlesnake (*Crotalus ruber ruber*) is a California Species of Special Concern. The County lists it as a Group 2 species. There are two occurrences of this species within five miles of the project area (Attachment 8). This species is most commonly associated with large rocks or boulders among heavy brush, including dense chaparral, coastal sage scrub, and desert slope scrub associations. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area. Individuals of this species may traverse the project area to access suitable habitat, such as crossing the access easement.

#### **Coast Horned Lizard**

Coast horned lizard (*Phrynosoma coronatum*) is covered under the MSCP, and listed as a California Species of Special Concern. The County lists it as a Group 2 species. There are twelve occurrences of this species within five miles of the project area (Attachment 8). The coast horned lizard inhabits coastal sage scrub and chaparral in areas of friable, rocky, or sandy soils in arid to semi-arid conditions. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area. Individuals of this species may traverse the project area to access suitable habitat, such as crossing the access easement.

#### **Southern California Rufous-crowned Sparrow**

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) is covered under the MSCP, and is listed as a California Species of Special Concern. The County lists it as a Group 1 species. There are eight occurrences of this species within five miles of the project area (Attachment 8). The species is a permanent resident of southern California and inhabits rocky hillsides in grassland, coastal scrub, and open chaparral. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area and this species may occur and nest there.

#### **Bell's Sage Sparrow**

Bell's sage sparrow (*Amphispiza belli belli*) is covered under the MSCP, and is listed as a California Species of Special Concern. The County lists it as a Group 1 species. There is one occurrence of this species within five miles of the project area (Attachment 8). Bell's sage sparrow breeds in low, dense chamise chaparral and in dry scrub communities, often with stands of cactus. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area and this species may occur and nest there.

#### San Diego Cactus Wren

San Diego cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is covered under the MSCP, and is listed as a California Species of Special Concern. The County lists it as a Group 1 species. There thirteen occurrences of this species within five miles of the project area (Attachment 8). The coastal cactus wren is a non-migratory resident of the coastal sage scrub community. The cactus wren additionally requires the presence of, but is not entirely restricted to, relatively arborescent (more than 3 feet tall) stands of cactus, including prickly pear and cholla cactus, where it constructs nests. No coast stands of these cacti species were observed in the coastal sage scrub habitat within the project area or its immediate vicinity. Therefore, although San Diego cactus wrens may forage immediately adjacent to the project area, they are not expected to nest there.

#### Coastal California Gnatcatcher

The coastal California gnatcatcher (*Polioptila californica californica*) is a small non-migratory member of the Old World warbler family (Sylviidae). This species is covered under the MSCP, and is listed as federally threatened and a California Species of Special Concern. The County lists it as a Group 1 species. An occurrence of this species was previously identified within the immediate vicinity of the project area in 1991. There are an additional thirty-four occurrences of this species within five miles of the project area (Attachment 8). Appropriate nesting habitat for this species occurs immediately adjacent to the project area. Furthermore, four gnatcatchers were observed foraging together in the coastal sage scrub habitat adjacent to the project area during the field survey (see Attachment 3, Biological Resource Map, for location of observations). Therefore, this species occurs within the project area vicinity, and may nest immediately adjacent to the project area.

#### **Dulzura Pocket Mouse**

The Dulzura pocket mouse (*Chaetodipus californicus femoralis*) is a California Species of Special Concern. The County lists it as a Group 2 species. There are two occurrences of this species within five miles of the current study area (Attachment 8). This species inhabits open costal sage scrub, chaparral and grassland. Although this species was not observed during the field survey, suitable habitat exists

immediately adjacent to the project area. Individuals of this species may traverse the project area to access suitable habitat, such as crossing the access easement.

#### Northwestern San Diego Pocket Mouse

The Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a California Species of Special Concern. The County lists it as a Group 2 species. There are two occurrences of this species within five miles of the project area (Attachment 8). This species inhabits open or disturbed coastal sage scrub and grassland in primarily sandy soils. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area. Individuals of this species may traverse the project area to access suitable habitat, such as crossing the access easement.

#### San Diego Black-tailed Jackrabbit

The San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) is a California Species of Special Concern. The County lists it as a Group 2 species. There are three occurrences of this species within five miles of the project area (Attachment 8). This species inhabits plant communities that include a mixture of shrubs, grasses, and forbs. Areas containing a mixture of shrubland and herbaceous cover are preferred over pure stands of shrubs or herbs. Although this species was not observed during the field survey, suitable habitat exists immediately adjacent to the project area. Individuals of this species may traverse the project area to access suitable habitat, such as crossing the access easement.

#### JURISDICTIONAL WETLANDS AND WATERWAYS

There are no potentially jurisdictional wetlands, waterways, or riparian habitat located within or adjacent to the project area.

### OTHER UNIQUE FEATURES/RESOURCES

#### WILDLIFE CORRIDORS

A wildlife corridor, also called a habitat linkage or landscape linkage, is a large patch of habitat connecting two or more larger areas of habitat that would otherwise be isolated from one another. Wildlife corridors are typically bordered on two sides by urban areas or other types of human development. A functioning wildlife corridor allows for ease of movement between habitat patches. For example, canyon bottoms with a well-developed tree canopy often serve as wildlife corridors and offer food, shelter, and water, as well as ease of movement, depending upon the density of the understory. Corridors function to prevent habitat fragmentation that would result in the loss of species that require large contiguous expanses of unbroken habitat and/or that occur in low densities. Habitat fragmentation can result in increases in the number of non-native species and may allow inbreeding to occur in species whose populations are small because they have become confined to smaller areas. This, in turn, reduces the rate of reproductive success. Fragmentation also reduces functioning ecosystems to small pockets, decreasing biodiversity and the interactive processes required for healthy ecosystem functioning. Thus, corridors promote gene flow, allow re-colonization of areas following catastrophic events such as fire, prevent the loss of large animals by linking suitable habitat areas, and help to ensure the survival of native species that cannot compete with more aggressive non-native species in fragmented habitats.

The project area is bordered by existing open space within the hardline preserve. Because the project area contains no native habitats, it does not serve as a wildlife corridor linking two or more open space areas.

Moreover, because the project is located almost entirely within the footprint of the Olivenhain Water District's Use Permit area, the project will not restrict wildlife movements any more than the conditions that currently exist there.

#### **NESTING BIRD HABITAT**

Appropriate nesting habitat for birds protected under the Migratory Bird Treaty Act and Fish and Game Codes 3503, 3503.5, and 3513 occurs within the project area and its immediate vicinity. Numerous bird species were identified throughout the project area, including those that nest in non-native grassland, Diegan sage coastal scrub, and landscaped habitats, including eucalyptus trees.

# SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

#### IMPACT ANALYSIS METHODS

In support of the environmental analyses required for compliance with the MSCP and CEQA, SWCA assessed potential impacts to biological resources, including special-status species, within the project area. The analysis included identification of potentially significant impacts based on the CEQA thresholds from Appendix G of the CEQA Guidelines. To reduce or avoid potentially significant impacts, SWCA also identified mitigation measures, which are presented in the following section of this report. Thresholds used in analyzing impacts resulting from the proposed project include the following:

- Would the project have a substantial adverse effect, either directly or through habitat
  modifications, on any species identified as a candidate, sensitive, or special status species in local
  or regional plans, policies, or regulations, or by the California Department of Fish and Game or
  U.S. Fish and Wildlife Service?
- Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
- Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?
- Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

#### **IDENTIFICATION OF PROJECT IMPACTS**

The purpose of this investigation was to determine whether the proposed project would have a significant negative impact on sensitive biological resources within or adjacent to the project area. The following discussion details the analysis of potential impacts that the proposed project may have on sensitive biological resources. The significance of potential impacts of the proposed project was assessed per the County of San Diego's Guidelines for Determining Significance, Biological Resources (2006).

#### **Impacts to Sensitive Species**

#### Special-status Avian Species; Nesting Migratory, Raptorial, and Native Avian Species

One special-status avian species, the federally threatened coastal California gnatcatcher, was observed in an area of coastal sage scrub immediately adjacent to the project area. The occurrence consisted of four gnatcatchers of unknown sex, observed foraging together in two locations. Three other special-status avian species have the potential to occur and/or nest immediately adjacent to the project area, including Southern California rufous-crowned sparrow, Bell's sage sparrow, San Diego cactus wren. Finally, nesting migratory, raptorial, and native avian species protected under the Migratory Bird Treaty Act and Fish and Game Codes 3503, 3503.5, and 3513 could potentially nest within or immediately adjacent to the project area.

The construction activities associated with the proposed project could result in significant impacts to actively nesting birds, including the nests of special-status species. The breeding season for birds occurs between January 15 through August 31; implementation of the project during this period could result in both direct and indirect impacts. Direct project impacts would include the destruction of active nests, eggs, or young located within vegetation removed within the proposed project area. Indirect impacts would include noise (exceeding 60 dB(A)) and disturbance associated with the construction activities that cause birds in adjacent habitats to abandon their nests. Any impacts (direct or indirect) that result in the abandonment or destruction of an active nest or the destruction of eggs or young of any protected avian species, including special-status species, would be considered a significant impact.

#### **Special-status Reptile and Mammal Species**

Several special-status reptilian and mammalian species have the potential to occur within and immediately adjacent to the project area. These include the orange-throated whiptail, coast horned lizard, northern red-diamond rattlesnake, Dulzura pocket mouse, northwestern San Diego pocket mouse, and San Diego black-tailed jackrabbit. Construction activities associated with the proposed project, such as trenching for the utility easement, could result in the trapping and possible destruction of individuals of these special-status species, which would be considered a significant impact.

#### PROPOSED MITIGATION MEASURES

#### **Mitigation for Impacts to Sensitive Species**

#### **Avian Species**

SWCA recommends that construction activities associated with implementation of the project be performed outside of the breeding season for birds. Avian species, including special-status species that

could occur and breed within and adjacent to the project area, typically breed between January 15 through August 31. If the project cannot be implemented between September 1 and January 14, the project proponent should retain a qualified biologist to perform pre-construction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area.

Active non-raptor nests (including those of coastal California gnatcatcher and other special-status species) identified within the project area or within 300 feet of the project area should be marked with a 300-foot buffer, and the buffer area would need to be avoided by construction activities. Active raptor nests within and adjacent to the project site should be marked with a 500-foot buffer and the buffer avoided.

#### **Reptile and Mammal Species**

SWCA recommends that a temporary fence such as a silt fence be placed along the edge of the construction limits adjacent to coastal sage scrub and grassland habitats during construction to serve as a limit line for equipment operators, as well as an obstacle for animals traversing the area. If the proposed utility easement trench is to remain open for more than one day, it is recommended that a qualified biologist monitor the trench for the presence of reptiles, amphibians, or rodents that may have become trapped in the trench overnight prior to the commencement of work the following day.

#### **CUMULATIVE IMPACTS**

The proposed project is located largely within the footprint of the existing Black Mountain Norte Tank, which is owned and operated by the Olivenhain Water District. At least one other telecommunications facility has already been co-located on the water tank. Potential impacts associated with the maintenance of these facilities are likely minimal, and would include periodic vehicular traffic along the existing access easement to reach the facilities. Because of the low volume and intermittent use of the easement by vehicular traffic, potential impacts to plant or wildlife species would not be considered a significant impact

The addition of the proposed project's facility to the existing facilities would not likely result in a considerable contribution of impacts. Maintenance of the proposed project's facilities would be intermittent, and therefore would not contribute substantially to the current use of the area. The project is not expected to result in significant cumulative impacts to sensitive biological resources.

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#### PREPARER AND PERSONS/ORGANIZATIONS CONTACTED

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or

**Gretchen Cummings** 

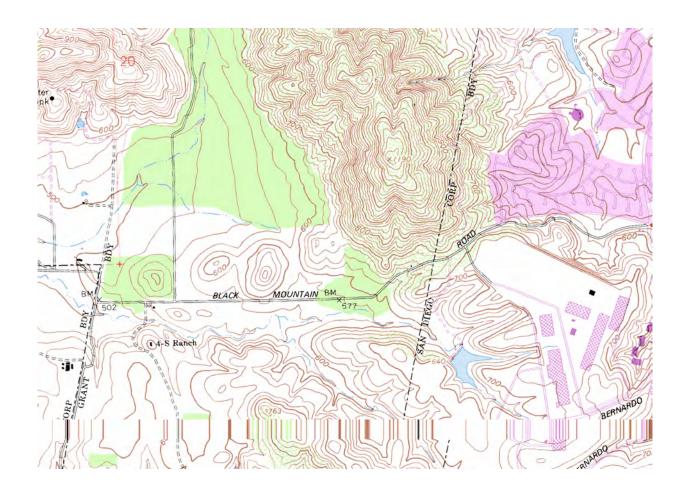
Principal Biologist, Cummings and Associates

P.O. Box 1209

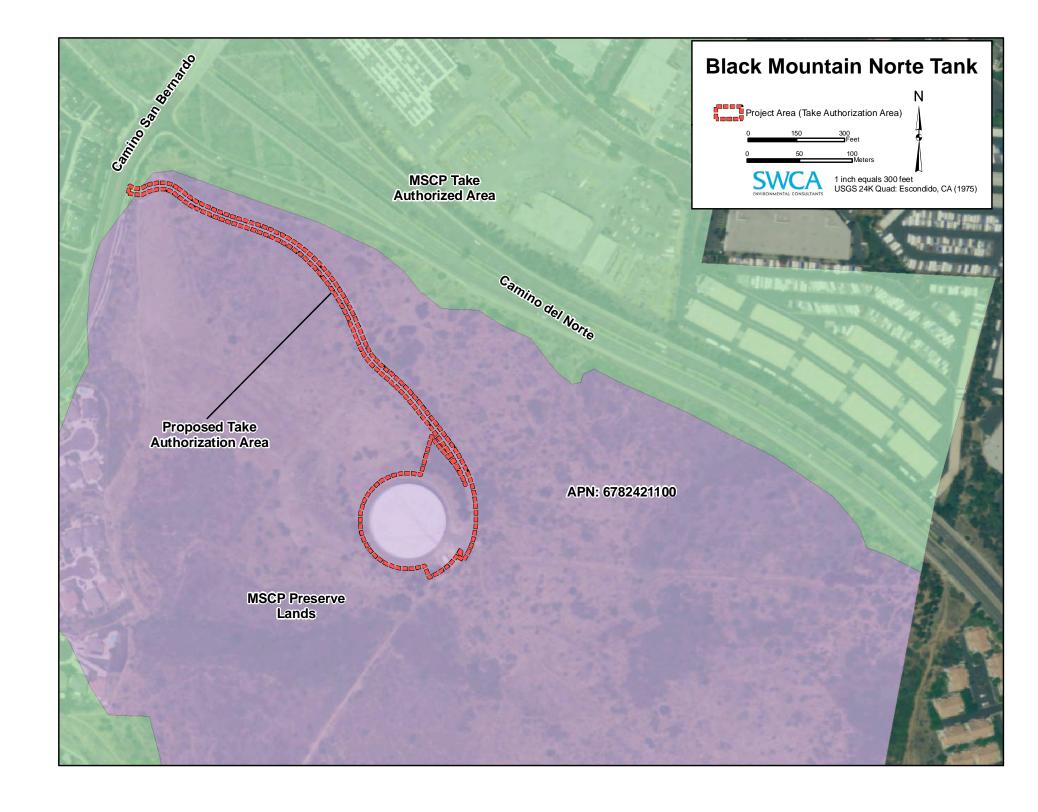
Ramona, California 92065 Office: (619) 233-5454 gretchen.bc@sbcglobal.net

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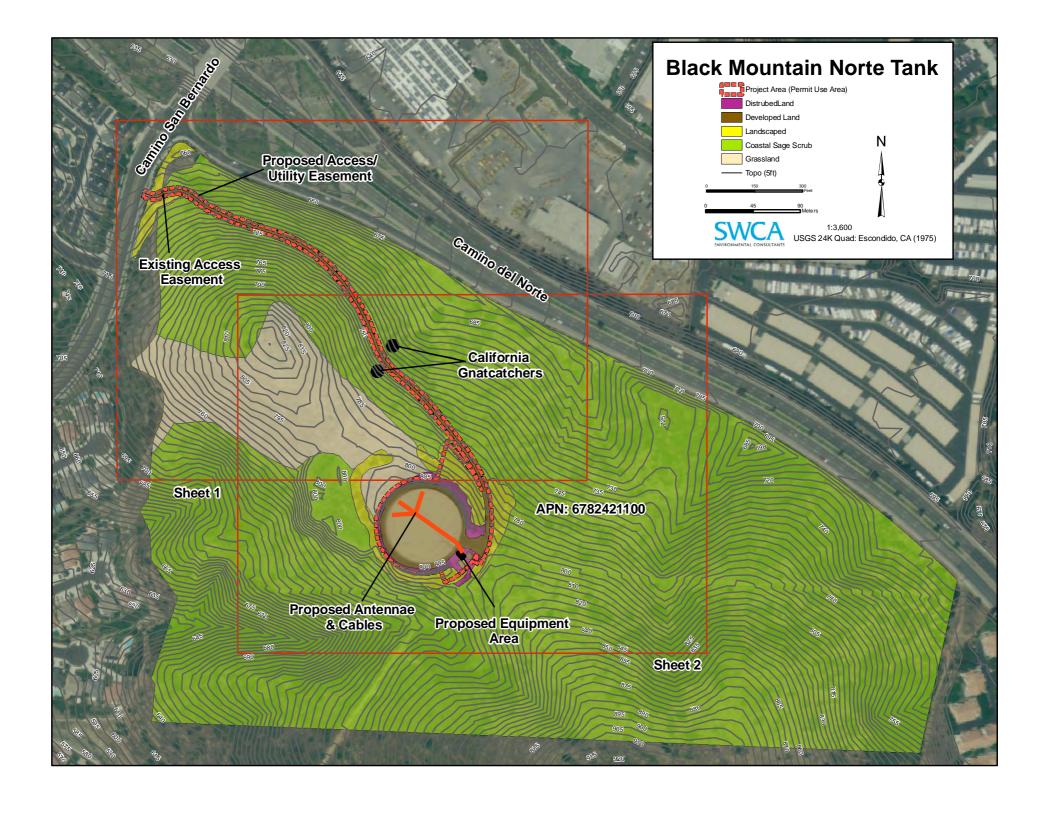
Project Location Map

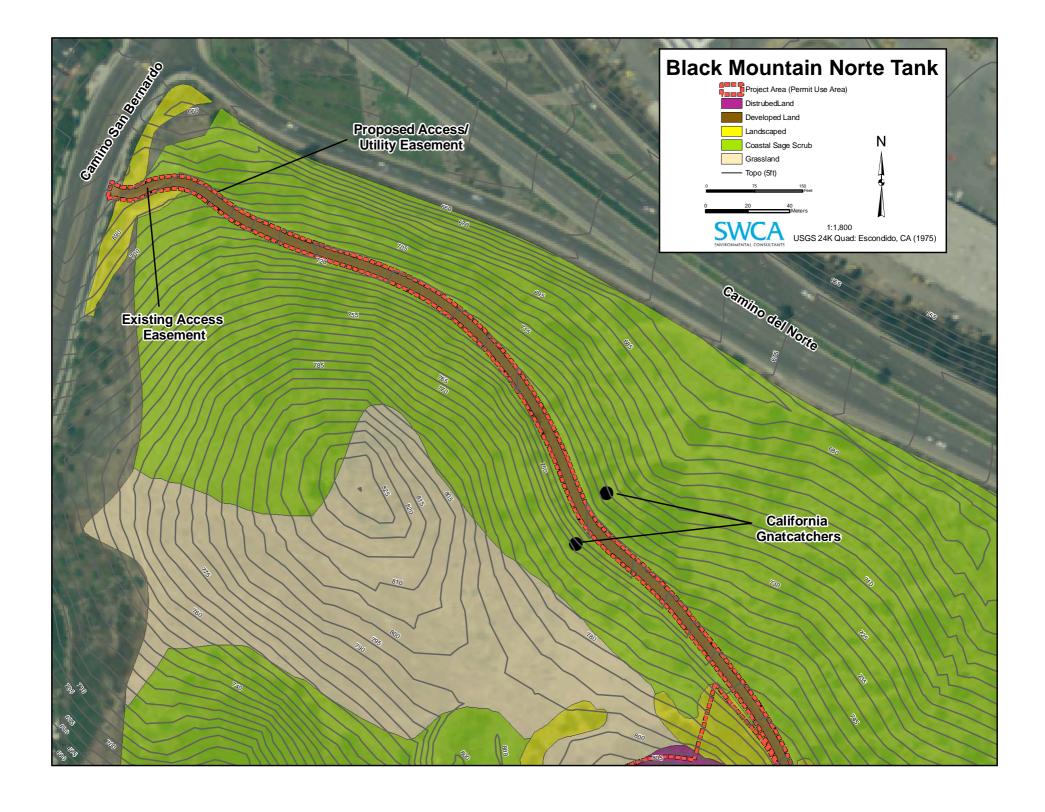


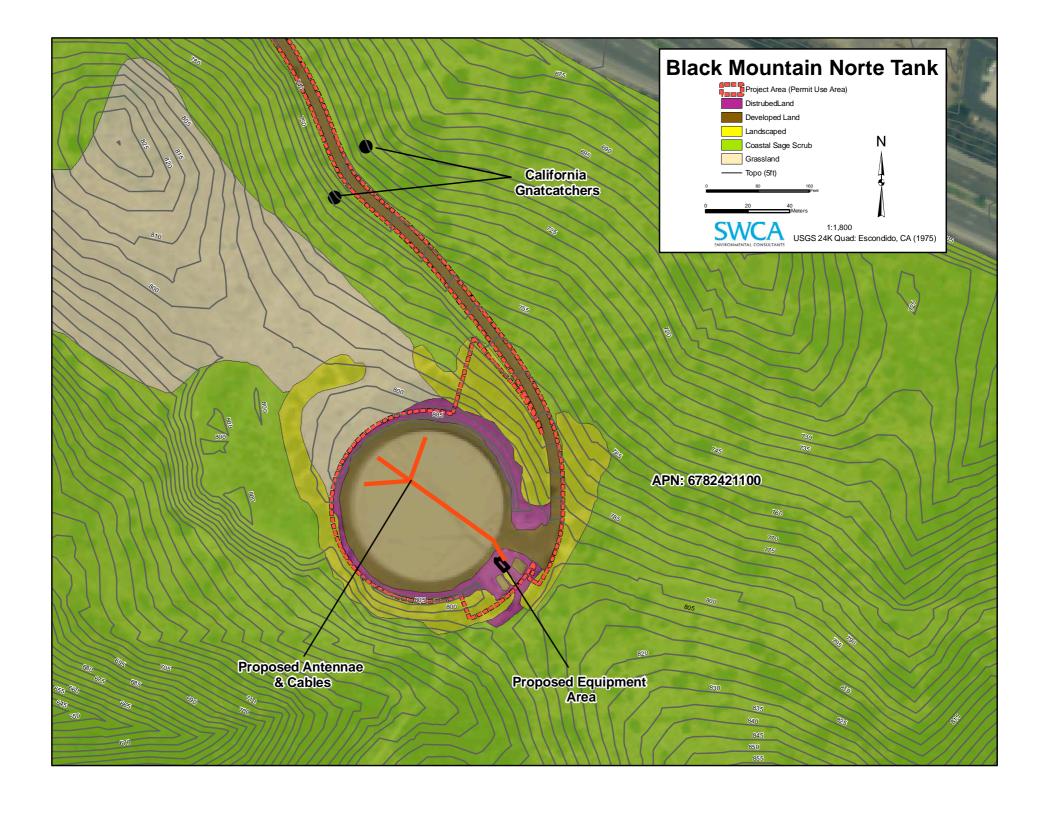
Proposed Take Authorization Area Within MSCP Preserve



Biological Resource Map







List of Plant Species Identified During Survey of the Project Area

Attachment 4. List of Plant Species Identified During Survey of the Project Area

Scientific Name	Common Name	Associated Habitat		
Achillea millefolium	Common yarrow	Landscaped		
Anagallis arvensis	Scarlet pimpernel	Landscaped, Developed, Disturbed		
Artemisia californica	California sagebrush	Coastal sage scrub		
Astragalus sp.	Milkvetch	Landscaped, Disturbed		
Atriplex lentiformis	Saltbush	Coastal sage scrub		
Avena barbata	Slender wild oats	Developed, Disturbed, Coastal sage scrub		
Avena fatua	Wild oats	Developed, Disturbed, Coastal sage scrub		
Baccharis pilularis	Coyotebrush	Disturbed, Non-native grassland		
Brassica nigra	Black mustard	Landscaped, Developed, Disturbed, Non- native grassland, Coastal sage scrub		
Bromus diandrus	Rip-gut brome	Developed, Disturbed, Non-native grassland, Coastal sage scrub		
Bromus hordeaceus	Soft brome	Developed, Disturbed, Coastal sage scrub		
Bromus madritensis ssp. rubens	Red brome	Developed, Disturbed, Non-native grassland, Coastal sage scrub		
Centaurea melitensis	Tocolote	Developed, Disturbed areas		
Chamaesyce prostrata	Prostrate spurge	Landscaped, Developed, Disturbed		
Conyza candensis	Canadian horseweed	Developed		
Cyclops acacia	Acacia	Landscaped		
Cynara cardunculus	Artichoke thistle	Coastal sage scrub		
Cynodon dactylon	Bermuda grass	Landscaped, Developed		
Cyperus squarrosus	Umbrella sedge	Landscaped		
Datura stramonium	Jimson weed	Developed		
Epilobium ciliatum	Fringed willowherb	Landscaped, Disturbed		
Eriogonum fasciculatum	California buckwheat	Coastal sage scrub, Non-native grassland		
Erodium cicutarium	Redstem filaree	Developed		
Eucalyptus sp.	Eucalyptus	Landscaped		
Foeniculum vulgare	Sweet fennel	Coastal sage scrub		
Gazania rigens	Gazania	Landscaped		
Gnaphalium californicum	California everlasting	Developed, Coastal sage scrub		
Gnaphalium canescens	Silver everlasting	Developed		
Lactuca serriola	Prickly lettuce	Developed		
Malacothrix sp.	Aster	Developed		
Malosma laurina	Laurel sumac	Coastal sage scrub		
Melilotus indica	Sour clover	Developed, Disturbed		
Mimulus aurantiacus	Sticky monkey flower	Developed, Disturbed		
Nerium oleander	Oleander	Landscaped, Developed		
Nicotiana glauca	Tree tobacco	Disturbed, Developed		
Rhus integrifolia	Lemonade berry	Disturbed, Landscaped		
Salsola tragus	Russian thistle	Developed, Disturbed		
Sonchus arvensis	Field sow-thistle	Developed		
Sonchus asper ssp. asper	Prickly sow-thistle	Developed		

List of Wildlife Species Identified During Survey of the Project Area

Attachment 5. List of Wildlife Species Identified During Survey of the Project Area

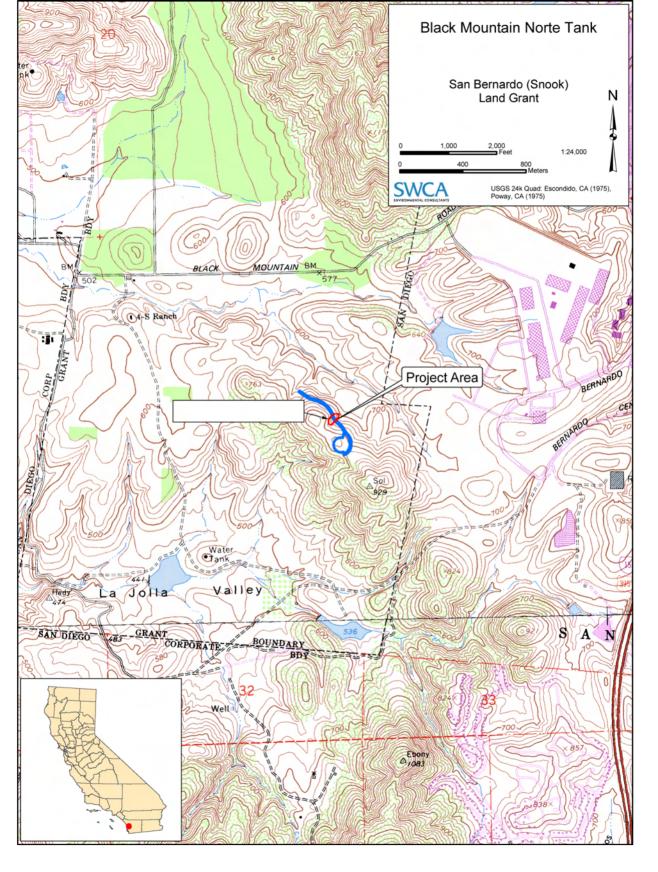
Scientific Name	Common Name	Associated Habitat		
Calypte anna	Anna's hummingbird	Landscaped, Disturbed		
Carduelis psaltria	Lesser goldfinch	Landscaped, Disturbed		
Carpodacus mexicanus	House finch	Landscaped, Coastal sage scrub		
Columba livia	Rock dove	Landscaped		
Falco sparveriuss	American kestrel	Coastal sage scrub		
Mimus polyglottos	Northern mockingbird	Landscaped, Developed		
Pipilo crissalis	California towhee	Landscaped, Disturbed, Coastal sage scrub		
Polioptila californica californica	Coastal California gnatcatcher	Coastal sage scrub		
Tyrannus verticalis	Western kingbird	Coastal sage scrub		

CNDDB Field Survey Form

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13<sup>th</sup> Street, Suite 202
Sacramento, CA 95814
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

	For Office Use Only	1
Source Code	Quad Code	
Elm Code	Occ. No	
EO Index No.	Map Index No	

Date of Field Work (mmlddlyyyy): 07 / 30/2007	IVIAD INDEX IVO.			
Reset California Native Species Field	Survey Form Send Form			
scientific Name: Polioptila californica californica				
common Name: Coastal California Gnatcatcher				
Total No. Individuals Subsequent Visit?yes no Is this an existing NDDB occurrence?	Reporter: Lauren Seckel  Address: 625 Faw Oaks, Suite 190  South Pasadina, CA 9/030  E-mail Address: Iseckel @ swca.com  Phone: (626)240-0587			
Phenology:%%% # adults # juveniles	# larvae # egg masses # unknown  The property is a string of the control of the c			
Location Description (please attach map AND/OR fill out your choice of coordinates, below)  County:San_Diego County				
Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):  Coastal Sage Scrub dominated by California Sagebrush (Artemesia California), California buckwheat (Eriogonum fasciculatum), and Laurel Sumac (Malosma laurina). On north-facing 45° slope divided by a paved access road.  Other rare taxa seen at THIS site on THIS date: (separate form preferred)  Site Information Overall site/occurrence quality/viability (site + population):   Excellent  Good  Fair Poor				
Immediate AND surrounding land use: Coastal sage scrub and non-native grassland, within Visible disturbances:  The Lake Hodges segment of the MSCP.  Threats:  Comments:				
Determination: (check one or more, and fill in blanks)         ☐ Keyed (cite reference):	Photographs: (check one or more)       Slide       Print       Digital         Plant / animal       □       □       □         Habitat       □       □       □         Diagnostic feature       □       □       □         May we obtain duplicates at our expense?       yes □       no □			



Special-status Species Database Search Results

Scientific Name	Common Name	Federal Status	State Status	Other	CNPS Status	General Habitat	Micro Habitat	Potential for Occurrence
Plants								
Acanthomintha ilicifolia	San Diego thornmint	FT	SE	MSCP	1B.1	Endemic to mesas and valleys within chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Active vertisol clay soils and clay lenses. 10-935m.	May occur; suitable habitat is present and there are local records within five miles.
Adolphia californica	California adolphia	None	None		2.1	Chaparral, coastal sage scrub, and valley and foothill grassland.	Found on sandy/gravelly to clay soils. 15-300m.	May occur; suitable habitat is present and there are local records within five miles.
Agave shawii	Shaw's agave	None	None	MSCP	2.1	Coastal bluffs and slopes within coastal sage scrub.	10-75m.	<b>Absent</b> ; outside of known range.
Ambrosia pumila	San Diego ambrosia	FE	None	MSCP	1B.1	Chaparral, coastal scrub, valley and foothill grassland, and vernal pools.	Disturbed areas in sandy loam or clay soils. Often along valley bottoms, along river floodplains, or nearby vernal pools. 20-415m.	May occur; suitable habitat is present and there are local records within five miles.
Aphanisma blitoides	Aphanisma	None	None	MSCP	1B.2	Coastal bluff scrub, coastal dunes, and coastal scrub.	Coastal bluffs near the ocean and beach dunes. 1-305m.	Absent; suitable habitat is not present and there are no local records within five miles.
Arctostaphylos glandulosa var. crassifolia	Del Mar Manzanita	FE	None	MSCP	1B.1	Sandy coastal mesas and ocean bluffs in chaparral or Torrey pine forests.	0-365m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Arctostaphylos rainbowensis	Rainbow manzanita	None	None		1B.1	Chaparral.	Usually found in gabbro chaparral. 270-790m.	Absent; suitable habitat is not present and there are no local records within five miles.

Scientific Name	Common Name	Federal Status	State Status	Other	CNPS Status	General Habitat	Micro Habitat	Potential for Occurrence
Astragalus oocarpus	San Diego milk- vetch	None	None	Other	1B.2	Chaparrral, cismontane woodlands, meadows.	Openings in chaparral or on gravelly flats and slopes in thin oak woodland. 305-1500m.	Absent; suitable habitat is not present and there are no local records within five miles.
Astragalus tener var. titi	Coastal dunes milk-vetch	FE	SE	MSCP	1B.1	Coastal bluff scrub and coastal dunes.	Moist sandy depressions of bluffs or dunes near the Pacific Ocean. 1-50m.	Absent; suitable habitat is not present and there are no local records within five miles.
Atriplex pacifica	South Coast saltscale	None	None		1B.2	Coastal scrub, coastal bluff scrub, playas, and chenopod scrub.	Alkali soils. 1-500m.	Absent; suitable habitat is not present and there are no local records within five miles.
Atriplex parishii	Parish's brittlescale	None	None		1B.1	Alkali meadows, vernal pools, chenopod scrub, and playas.	Drying alkali flats with fine soils. 4-140m.	Absent; suitable habitat is not present and there are no local records within five miles.
Baccharis vanessae	Encinitas baccharis	FT	SE	MSCP	1B.1	Chaparral.	Sandstone soils on steep, open, rocky areas with chaparral associates. 60-720m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Bergerocactus emoryi	Golden-spined cereus	None	None		2.2	Coastal scrub, and sometimes chaparral margins.	Usually on clay soils. 3-395m.	<b>Absent</b> ; outside of known range.
Brodiaea filifolia	Thread-leaved brodiaea	FT	SE	MSCP	1B.1	Cismontane woodland, coastal scrub, playas, valley and foothill grasslands, and vernal pools.	Clay soils in annual grasslands and vernal pools, often surrounded by shrubland habitats. 25-860m.	May occur; suitable habitat is present and there are local records within five miles.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Brodiaea orcuttii	Orcutt's brodiaea	None	None	MSCP	1B.1	Usually in vernal pools and small drainages but also valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, and meadows.	Mesic, clay habitats, sometimes serpentine. 30-1615m.	Absent; suitable habitat is not present and there are no local records within five miles.
Ceanothus cyaneus	Lakeside ceanothus	None	None	MSCP	1B.2	Closed-cone coniferous forest and chaparral.	100-1515m.	<b>Absent</b> ; outside of known range.
Ceanothus verrucosus	White coast ceanothus	None	None	MSCP	2.2	Chaparral.	1-380m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Centromadia parryi ssp. australis	Southern tarplant	None	None		1B.1	Margins of marshes and swamps, valley and foothill grasslands, vernal pools.	Disturbed sites near the coast. Alkaline soils, sometimes with salt grass. Vernal pools. 0-425m.	Absent; though there are occurrence records within five miles, the habitat is not suitable within the project area.
Centromadia pungens ssp. laevis	Smooth tarplant	None	None		1B.1	Grassland, scrub land, meadows, playas, riparian woodland; also disturbed areas.	Alkali meadow and scrub. 0-480m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Chaenactis glabriuscula orcuttiana	Orcutt's pincushion	None	None		1B.1	Coastal bluff scrub and coastal dunes.	Sandy soils. 3-100m.	Absent; suitable habitat is not present and there are no local records within five miles.

	G N	Federal	State	0.1	CNPS	G 177.11		Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Chorizanthe orcuttiana	Orcutt's spineflower	FE	SE		1B.1	Coastal scrub, chaparral, and closed-cone coniferous forest.	Sandy sites and openings. Sometimes found in transition zones. 3-125m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Chorizanthe polygonoides var. longispina	Long-spined spineflower	None	None		1B.2	Chaparral, coastal scrub, meadows, and valley and foothill grassland.	Gabbroic clay soils; typically found on clay lenses which are largely devoid of shrubs. 30- 1450m.	Absent; suitable habitat is not present and there are no local records within five miles.
Clarkia delicata	Delicate clarkia	None	None		1B.2	Cismontane woodland and chaparral.	235-1000m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Comarostaphylis diversifolia ssp. diversifolia	Summer holly	None	None	FSS	1B.2	Often in mixed chaparral.	Sometimes post-burn. 30-550m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Coreopsis maritima	Sea dahlia	None	None		2.2	Coastal scrub and coastal bluff scrub.	Occurs on a variety of soil types, including sandstone. 5-150m.	<b>Absent</b> ; outside of known range.
Corethrogyne filaginifolia var. incana	San Diego sand aster	None	None			Coastal scrub, coastal bluff scrub and chaparral.	Possibly in disturbed sites and ecotones. 3-115m.	<b>Absent</b> ; outside of known range.
Corethrogyne filaginifolia var. linifolia	Del Mar Mesa sand aster	None	None	MSCP	1B.1	Chaparral and coastal scrub.	Coastal shrubby communities on maritime sediments and conglomerates. 30-150m.	<b>Absent</b> ; outside of known range.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Dudleya brevifolia	Short-leaved dudleya	None	SE	MSCP	1B.1	Chaparral and coastal scrub.	Pebbly openings with torrey sandstone soils. 30-250m.	<b>Absent</b> ; outside of known range.
Dudleya variegata	Variegated dudleya	None	None	MSCP	1B.2	Chaparral, coastal scrub, cismontane woodland, valley and foothill grassland, and vernal pools.	Openings in sage scrub and chaparral; sometimes associated with vernal pool margins. In rocky or clay soils. 3-550m.	May occur; suitable habitat is present and there are local records within five miles.
Dudleya viscida	Sticky dudleya	None	None	MSCP	1B.2	Coastal scrub, coastal bluff scrub, and chaparral.	North and south-facing cliffs and banks. 10-550m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Ericameria palmeri ssp. palmeri	Palmer's goldenbush	None	None	MSCP	2.2	Coastal scrub and chaparral.	On granitic soils, on steep hillsides, and mesic sites. 100-600m.	May occur; suitable habitat is present and there are local records within five miles.
Eryngium aristulatum var. hooveri	Hoover's button- celery	None	None		1B.1	Vernal pools.	3-45m.	Absent; suitable habitat is not present and there are no local records within five miles.
Eryngium aristulatum var. parishii	San Diego button- celery	FE	SE	MSCP	1B.1	Coastal scrub, and valley and foothill grassland.	San Diego mesa hardpan and claypan vernal pools, and southern interior basalt flow vernal pools. 15-620m.	<b>Absent</b> ; though there are occurrence records within five miles, the habitat is not suitable within the project area.
Euphorbia misera	Cliff spurge	None	None		2.2	Coastal bluff scrub and coastal scrub.	Rocky sites. 10-500m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Ferocactus viridescens	San Diego barrel cactus	None	None	MSCP	2.1	Chaparral, Diegan coastal scrub, and valley and foothill grassland.	Often on exposed, level or south-sloping areas and crests of slopes. 3-485m.	May occur; suitable habitat is present and there are local records within five miles.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Geothallus tuberosus	Campbell's liverwort	None	None		1B.1	Coastal scrub, vernal pools. Most suitable habitat has been lost to urbanization.	Mesic soils. 10-600m.	Absent; though there are occurrence records within five miles, the habitat is not suitable within the project area.
Githopsis diffusa ssp. filicaulis	Mission Canyon bluecup	None	None		3.1		Open grassy places. Mesic, disturbed areas. 450-700m.	<b>Absent</b> ; outside of known range.
Grindelia hirsutula var. hallii	gumplant	None	None		1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, and valley and foothill grasslands.	185-1745m.	Absent; suitable habitat is not present and there are no local records within five miles.
Hazardia orcutti	Orcutt's hazardia	FC	ST		1B.1	Chaparral and coastal scrub.	Clay soils in grassy edges of chaparral and coastal scrub. 85m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Horkelia truncata	Ramona horkelia	None	None		1B.3	Chaparral and cismontane woodland.	disturbed areas near roads. Clay soils. 400- 1300m.	Absent; suitable habitat is not present and there are no local records within five miles.
Isocoma menziesii var. decumbens	Decumbent goldenbush	None	None		1B.2	Often in disturbed sites, within coastal scrub.	Sandy soils. 10-910m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Iva hayesiana	San Diego marsh- elder	None	None		2.2	Riverwashes, marshes, swamps, and playas.	10-500m.	Absent; though there are occurrence records within five miles, the habitat is not suitable within the project area.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None	None		1B.1	Coastal salt marshes, playas, valley and foothill grassland, vernal pools.	Usually found on alkaline soils. 1-1400m.	Absent; suitable habitat is not present and there are no local records within five miles.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Lepechinia	Heart-leaved	None	None	MSCP	1B.2	Closed-cone coniferous	550-1370m.	Absent; suitable habitat
cardiophylla	pitcher sage					forest, chaparral, and		is not present and there
						cismontane woodland.		are no local records
								within five miles.
Lepidium	Robinson's	None	None		1B.2	Chaparral and coastal	Dry soils. 1-945m.	Not likely to occur;
virginicum var.	pepper-grass					scrub.		suitable habitat is present
robinsonii								but there are no local
								records within five miles.
Lotus nuttallianus	Nuttall's lotus	None	None	MSCP	1B.1	Coastal dunes and coastal	Sand dunes. 0-10m.	<b>Absent</b> ; outside of known
						scrub.		range.
Monardella	Felt-leaved	None	None	MSCP	1B.2	Chaparral and cismontane		Absent; though there are
hypoleuca ssp.	monardella					woodland.	sandy soils. 300-1575m.	occurrence records within
lanata								five miles, the habitat is
								not suitable within the
								project area.
Monardella	Willowy	FE	SE	MSCP	1B.1	Coastal scrub/ alluvial	In canyons, in rocky and	Absent; suitable habitat
viminea	monardella					ephemeral washes with	sandy places, sometimes	is not present and there
							in washes or floodplains.	are no local records
						chaparral, or sycamore	50-225m.	within five miles.
						woodland.		
Muilla clevelandii	San Diego	None	None	MSCP	1B.1	Chaparral, coastal scrub,	Clay soils, often on	Present; species has been
	Goldenstar						mounds between vernal	recorded from within the
						_	pools in fine, sandy loam.	immediate project area
						pools.	50-1090m.	vicinity and there is
								suitable habitat within the
16	T 1:-1	27	2.7		2.1	X7 1 1	411 11 11 20 640	project area.
Myosurus minimus	Little mousetail	None	None		3.1	Vernal pools.	Alkaline soils. 20-640m.	Absent; suitable habitat
ssp. apus								is not present and there
								are no local records
M	C	ET	Mani	MCCD	1D 1	Variational and the second	Can Diaga bandaan 1 1	within five miles.
Navarretia fossalis		FT	None	MSCP	1B.1	Vernal pools, chenopod	San Diego hardpan and	<b>Absent</b> ; though there are
	navarretia					scrub, marshes and	claypan vernal pools and	occurrence records within
						swamps, and playas.	swales; often surrounded	five miles, the habitat is
							by other habitat types. 30-	not suitable within the
							1300m.	project area.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Nemacaulis denudata var. denudata	Coast woolly- heads	None	None		1B.2	Coastal dunes.	0-100m.	<b>Absent</b> ; outside of known range.
Opuntia californica var. californica	Snake cholla	None	None		1B.1	Chaparral and coastal scrub.	30-150m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Packera ganderi	Gander's ragwort	None	SR		1B.2	Chaparral.	Recently burned sites and gabbro outcrops. 400-1200m.	Absent; suitable habitat is not present and there are no local records within five miles.
Pinus torreyana ssp. torreyana	Torrey pine	None	None	MSCP	1B.2	Chaparral and closed- cone coniferous forest.	Dry sandstone slopes. 70-160m.	<b>Absent</b> ; outside of known range.
Pogogyne abramsii	San Diego mesa mint	FE	SE	MSCP	1B.1	Vernal pools within valley and foothill grasslands, chaparral, and coastal scrub.	90-200m.	Absent; though there are occurrence records within five miles, the habitat is not suitable within the project area.
Pogogyne nudiuscula	Otay Mesa mint	FE	SE	MSCP	1B.1	Dry beds of vernal pools and moist swales.	85-250m.	<b>Absent</b> ; outside of known range.
Quercus dumosa	Nuttall's scrub oak	None	None		1B.1	Closed-cone coniferous forest, chaparral and coastal scrub near coast.	Sandy soils and sometimes clay loam. 15- 400m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Satureja chandleri	San Miguel savory	None	None	MSCP	1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland.	Rocky, gabbroic or metavolcanic substrates. 120-1005m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Senecio aphanactis	Rayless ragwort	None	None		2.2	Cismontane woodland and coastal scrub.	Drying alkaline flats. 20-575m.	Absent; suitable habitat is not present and there are no local records within five miles.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Sphaerocarpos drewei	Bottle liverwort	None	None		1B.1	Chaparral and coastal scrub. Most suitable habitat has been lost to urbanization.	In openings, on soil. 90-600m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Stemodia durantifolia	Purple stemodia	None	None		2.1	Sonoran desert scrub.	Sandy soils and mesic sites. 180-300m.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Suaeda esteroa	Estuary seablite	None	None		1B.2	Coastal marshes and swamps.	Clay, silt, and sand substrates. 0-5m.	<b>Absent</b> ; outside of known range.
Tetracoccus dioicus	Parry's tetracoccus	None	None	MSCP	1B.2	Chaparral and coastal scrub.	Stony, decomposed gabbroic soil. 150-1000m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Triquetrella californica	Coastal triquetrella	None	None		1B.2	Coastal bluff scrub and coastal scrub.	Moss growing on soil. 10-100m.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Invertebrates				I			1	
Branchinecta sandiegonensis	San Diego fairy shrimp	FE	None	MSCP		Endemic to San Diego County mesas.	Vernal pools.	Absent; though there are occurrence records within five miles, the habitat is not suitable within the project area.
Cicindela hirticollis gravida	Sandy beach tiger beetle	None	None			Areas adjacent to non-brackish water along the coast.	Clean, dry, light-colored sand in the upper zone. Larvae prefer sand not affected by wave action.	<b>Absent</b> ; outside of known range.
Cicindela senilis frosti	Tiger beetle	None	None			Marine shoreline and salt marshes.	Inhabits dark-colored mud in the lower zone and dried salt pans in the upper zone.	Absent; outside of known range.

Scientific Name	Common Name	Federal Status	State Status	Other	CNPS Status	General Habitat	Micro Habitat	Potential for Occurrence
Coelus globosus	Globose dune beetle	None	None	o mer	Status	Inhabits coastal sand dune habitat.	Inhabits foredunes and sand hummocks. Most common beneath dune vegetation.	Absent; outside of known range.
Danaus plexippus	Monarch butterfly	None	None			Roosts in wind-protected tree groves.	Roosts with nectar and water sources nearby, commonly in Eucalyptus, Monterey Pine, and Cypress.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Melitta californica	bee	None	None			Desert regions of southwestern Arizona, southeastern California, and Baja California, Mexico.	Earlier records of <i>Melita</i> wilmattae pertain to this species.	Absent; suitable habitat is not present and there are no local records within five miles.
Streptocephalus woottoni	Riverside fairy shrimp	FE	None	MSCP		Endemic to west Riverside and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub.	Inhabits seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	is not present and there are no local records
Tryonia imitator	Mimic tryonia (California brackishwater snail)	None	None			Coastal lagoons, estuaries, and salt marshes.	Permanently submerged areas in a variety of sediment types and a wide range of salinities.	<b>Absent</b> ; outside of known range.
Amphibians								
Bufo californicus	Arroyo toad	FE	SC	MSCP		Semi-arid regions near washes or intermittent streams, including valley- foothill and desert riparian, desert washes, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores. Loose gravelly areas of streams in drier parts of range.	Absent; suitable habitat is not present and there are no local records within five miles.

Scientific Name	Common Name	Federal Status	State Status	Other	CNPS Status	General Habitat	Micro Habitat	Potential for Occurrence
Spea hammondii	Western spadefoot	None	SC	BLMS		Occurs primarily in grassland habitat, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg- laying.	Absent; suitable habitat is not present and there are no local records within five miles.
Reptiles								
Aspidoscelis hyperythra	Orange-throated whiptail	None	SC	MSCP		Inhabits low elevation coastal scrub, chaparral and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food-termites.	May occur; suitable habitat is present and there are local records within five miles.
Aspidoscelis tigris stejnegeri	Coastal western whiptail	None	None			Open grassland, desert and semi-arid habitats with sparse vegetation. Also woodland and riparian areas.	Firm soil, sandy, or rocky substrate.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Charina trivirgata	Rosy boa	None	None	FSS, BLMS		Desert and chaparral from the coast to the Mojave and Colorado Deserts. Prefers moderate to dense vegetation and rocky cover.	brushy cover and rocky soil such as coastal	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Crotalus ruber ruber	Northern red- diamond rattlesnake	None	SC			Chaparral, woodland, grassland, and desert areas.	Rocky areas and areas with dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	May occur; suitable habitat is present and there are local records within five miles.
Diadophis punctatus similis	San Diego ringneck snake	None	None			Open, rocky areas.	Prefers areas with surface litter or herbaceous vegetation for cover. Often found in moist areas near streams.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.

Streams, and irrigation ditches with aquatic vegetation.   Sandy or grassy upland sites for egg-laying.   Sin not present and there are no local records within five miles.			Federal	State		CNPS			Potential for
turtle turtle streams, and irrigation ditches with aquatic vegetation.  Coronado skink None None Scitionianus interparietalis  Coronado skink None None site for ege-laying.  Coronado skink None None None interparietalis  Coronado skink None None None None interparietalis  Coronado skink None None None None interparietalis  Coronado skink None None None None None interparietalis  Coronado skink None None None None None None None None	Scientific Name	Common Name	Status			Status			
ditches with aquatic vegetation.    Coronado skink   None   None   Grassland, chaparral, pinyon-juniper and juniper sage woodland, pine-oak and pine forests in coast ranges.   Phrynosoma   Coast horned   lizard   None   SC   FSS, MSCP   Saturdora   Coast patch-nosed snake   None sake   Salvadora   Salvado	Emys marmorata	Western pond	None	SC	MSCP				· · · · · · · · · · · · · · · · · · ·
Eumeces   Coronado skink   None   None   Grassland, chaparral, pinyon-juniper and juniper sage woodland, pine-oak and pine forests in coast ranges. Perfers open areas. Found in rocky areas close to streams and on dry hillsides.  Phrynosoma   Coast horned   None   SC   FSS, MSCP   Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.  Salvadora   Coast patch-nosed   None stade of the stade		turtle							
Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or sallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open areas. Found in rocky areas close to streams and on dry hillsides. In coast ranges. Prefers friable, rocky or shallow sandy soil. Prefers open shallow sa								sites for egg-laying.	
pinyon-juniper and juniper sage woodland, pine-oak and pine forests in coast ranges.  Phrynosoma   Coast horned   None   SC   FSS,   Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.  Salvadora   Coast patch-nosed shade   None   SC   Brushy or shrubby vegetation in coastal southern California.  Thamnophis   Two-striped garter snake   Sinds    Thamnophis   Two-striped garter snake   Sinds    Thamnophis   Schamnophis   Schamnophis   Schamnophis   Schamnophis    Thamnophis   Schamnophis   Schamnophis   Schamnophis    Thamnophis   Schamnophis   Schamnophis   Schamnophis   Schamnophis    Thamnophis   Schamnophis   Schamnophis   Schamnophis   Schamnophis    Thamnophis   Schamnophis   Schamnophis   Schamnophis   Schamnophis    Thannophis   Schamnophis   Schamnophis   Schamnophis   Schamnophis    Thamnophis   Schamnophis   Schamnoph									
interparietalis    Coast horned   None   SC   FSS,   Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.    Coast patch-nosed hexalepis virgultea   Salvadora   Salvad		Coronado skink	None	None					
Phrynosoma   Coast horned   None   SC   FSS,   Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.   Brushy or shrubby vegetation in coastal southern California.   Solveringultea   Salvadora hexalepis virgultea   None   SC   FSS,   Blams   Suthern California   Solveringultea									
Phrynosoma   Coast horned   lizard   None   SC   FSS,   Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.	interparietalis								
Coast horned lizard								hillsides.	records within five miles.
Salvadora   Salv	D1	Canathannal	Mana	CC	ECC			Duefens frielde meelen en	Mary a corres estimately
Salvadora   Coast patch-nosed   Salvadora   hexalepis virgultea   snake   None   SC   Brushy or shrubby   vegetation in coastal   southern California.   SC   STSS,   BLMS   Bl	*		None	SC					
Coast patch-nosed snake   SC   Brushy or shrubby vegetation in coastal southern California.   Sc   Brushy or shrubby vegetation in coastal burrows for refuge and overwintering sites.   Suitable habitat is present but there are no local records within five miles.	Coronaium	lizaiu			MISCI				
Coast patch-nosed snake   None   SC   Brushy or shrubby vegetation in coastal southern California.   Brushy or shrubby vegetation in coastal southern California burrows for refuge and overwintering sites.   Brushy or shrubby vegetation in coastal southern California burrows for refuge and overwintering sites.   Brushy or shrubby vegetation in coastal southern California burrows for refuge and overwintering sites.   Brushy or shrubby vegetation in coastal suitable habitat is present but there are no local records within five miles.   Absent; suitable habitat is not present and there are no local records within five miles.   Brushy or shrubby vegetation in coastal suitable habitat is not present and there are no local records within five miles.   Brushy or shrubby vegetation in coastal suitable habitat is not present and there are no local records within five miles.   Absent; suitable habitat is not present but there are no local records within five miles.   Absent; suitable habitat is not present prediction or near permanent fresh water. Often along streams with rocky beds and riparian growth.   Absent; suitable habitat is not present are no local records within five miles.   Absent; suitable habitat is not									
vegetation in coastal southern California.   burrows for refuge and overwintering sites.   burrows for suitable habitat is present but there are no local records within five miles.   burrows for refuge and overwintering sites.   burrows for refuge and overwintering sites.   burrows for suitable habitat is present but there are no local records within five miles.   burrows for refuge and overwintering sites.   burrows for refuge and overwintering sites.   burrows for suitable habitat is port present and there are no local records within five miles.   burrows for refuge and overwintering sites.   burrows for suitable habitat is port present and there are no local records within five miles.   burrows for suitable habitat is port present but there are no local records within five miles.   burrow	Salvadora	Coast patch-nosed	None	SC				Require small mammal	
Southern California		-	Tione	50					
Thamnophis nake  Two-striped garter snake  SC FSS, BLMS  BLMS  Baja California. From sea level to about 7,000 ft. elevation.  Birds  Accipter cooperii  Cooper's hawk (N) None  Cooper's hawk (N) None  SC MSCP  Woodland, chiefly of open, interrupted or marginal type.  Woodland, chiefly of open, interrupted or marginal type.  Woodland, chiefly of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Agelaius tricolor  Tricolored blackbird  Tricolored blackbi									
BLMS   Salinas to NW   Baja California. From sea level to about 7,000 ft. elevation.   SC   MSCP   Woodland, chiefly of open, interrupted or marginal type.   Woodlains; also live in oaks.   MSCP   Wiching treams with rocky beds and riparian growth.   Not likely to occur; suitable habitat is present but there are no local records within five miles.								S	records within five miles.
Baja California. From sea level to about 7,000 ft. elevation.  Birds  Accipter cooperii  Cooper's hawk (N)  None  SC MSCP  Woodland, chiefly of open, interrupted or marginal type.  Agelaius tricolor  Tricolored blackbird  None  SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Baja California. From sea level to about 7,000 ft. elevation.  Woodland, chiefly of open, interrupted or marginal type.  Not likely to occur; suitable habitat is present but there are no local records within five miles.  Not likely to occur; suitable habitat is present but there are no local records within five miles.  Not likely to occur; suitable habitat is present but there are no local records within five miles.  Absent; suitable habitat is not present and there are no local records within five miles.	Thamnophis	Two-striped garter	None	SC	FSS,		Coastal California from	Highly aquatic, found in	Absent; suitable habitat
Level to about 7,000 ft. elevation.   Streams with rocky beds and riparian growth.	hammondii	snake			BLMS				is not present and there
Birds  Accipter cooperii Cooper's hawk (N) None SC MSCP  Agelaius tricolor Tricolored blackbird  None SC BLMS, MSCP  Woodland, chiefly of open, interrupted or marginal type.  Wot likely to occur; suitable habitat is present but there are no local records within five miles.  Woodland, chiefly of open, interrupted or marginal type.  Wot likely to occur; suitable habitat is present but there are no local records within five miles.  Absent; suitable habitat is not present and there are no local records within five miles.									
Accipter cooperii Cooper's hawk (N) None SC MSCP Woodland, chiefly of open, interrupted or marginal type.  Woodland, chiefly of open, interrupted or marginal type.  Woodland, chiefly of open, interrupted or marginal growths of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Agelaius tricolor  Tricolored blackbird  None SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Woodland, chiefly of niparian growths of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Absent; suitable habitat is not present and there are no local records within five miles.							,		within five miles.
Accipter cooperii Cooper's hawk (N) None SC MSCP Woodland, chiefly of open, interrupted or marginal type.  Woodland, chiefly of open, interrupted or marginal type.  Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Agelaius tricolor Tricolored blackbird None SC BLMS, MSCP Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California. Woodland, chiefly of open, interrupted or miparian growths of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Not likely to occur; suitable habitat is present but there are no local records within five miles.  Absent; suitable habitat is not present and there are no local records within five miles.							elevation.	and riparian growth.	
open, interrupted or marginal type.  open, interrupted or marginal type.  open, interrupted or marginal type.  riparian growths of deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Agelaius tricolor  Tricolored blackbird  None SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  within a few km of the  suitable habitat is present but there are no local records within five miles.  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  within a few km of the	271 45	[		I	I			I	
marginal type.  marginal type.  deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Agelaius tricolor  Tricolored blackbird  None SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Marginal type.  deciduous trees, as in canyon bottoms, on river floodplains; also live in oaks.  Absent; suitable habitat is not present and there are no local records within five miles.	Accipter cooperii	Cooper's hawk (N)	None	SC	MSCP				
Canyon bottoms, on river floodplains; also live in oaks.  Agelaius tricolor  Tricolored blackbird  None SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Canyon bottoms, on river floodplains; also live in oaks.  Absent; suitable habitat is not present and there are no local records within five miles.									
Agelaius tricolor  Tricolored blackbird  None SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Within a few km of the							marginal type.		
Agelaius tricolor  Tricolored blackbird  None SC BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Which is not present and there are no local records within five miles.  Absent; suitable habitat is not present and there are no local records within five miles.									records within five miles.
Agelaius tricolor  Tricolored blackbird  None  SC  BLMS, MSCP  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.  Requires open water, protective nesting is not present and there are no local records within five miles.								-	
blackbird  MSCP  most numerous in the Central Valley and vicinity. Largely endemic to California.  most numerous in the protective nesting substrate and foraging are a with insect prey endemic to California.  within a few km of the substrate and there are no local records within five miles.	Agalajus trigolor	Tricolored	None	SC	DIMC		Highly colonial enesies		A beant: quitable habitet
Central Valley and substrate and foraging vicinity. Largely area with insect prey endemic to California. within a few km of the	Ageidius iricolor		None	SC					
vicinity. Largely area with insect prey within five miles. endemic to California. within a few km of the		oldekollu			IVIOCI				
endemic to California. within a few km of the									
							The state of the s	colony.	

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Aimophila ruficeps	Southern	None	SC	MSCP		Resident in southern	Frequents relatively	May occur; suitable
canescens	California rufous-					California coastal sage	steep, often rocky	habitat is present and
	crowned sparrow						hillsides with grass and	there are local records
							forb patches.	within five miles.
Amphispiza belli	Bell's sage	None	SC			Nests in hard chaparral	Nest located on the	May occur; suitable
belli	sparrow					dominated by fairly dense		
							in a shrub 6-18 inches	there are local records
							above ground. Territories	within five miles.
							about 50 yards apart.	
Aquila chrysaetos	Golden eagle	None	SC, FP	CDFS,		Rolling foothill or coast-	Cliff-walled canyons	Absent; suitable habitat
	(N&W)			BLMS,			provide nesting habitat in	is not present and there
				MSCP		grassland turns to	most parts of range; also	are no local nesting
						scattered oaks,	large trees in open areas.	records within five miles.
						sycamores, or large		
						digger pines.		
Athene cunicularia	Burrowing owl	None	SC	BLMS		Open, dry annual or	Subterranean nester,	Not likely to occur;
							dependent upon	suitable habitat is present
							burrowing mammals,	but there are no local
							especially California	records within five miles.
						growing vegetation.	ground squirrel.	
Campylorhynchus	San Diego cactus	None	SC	MSCP			Requires tall Opuntia	May occur; suitable
brunneicapillus	wren					coastal sage scrub.	cactus for nesting and	foraging habitat is present
sandiegensis							roosting.	and there are local
								records within five miles;
								however, there is a lack
								of suitable nesting
								habitat.
Charadrius	Western snowy	FT	SC	MSCP			Requires sandy, gravelly	<b>Absent</b> ; outside of known
alexandrinus	plover (coastal						or friable soil substrates	range.
nivosus	population) (N)					salt pond levees and the	for nesting.	
						shores of large alkali		
						lakes.		

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Elanus leucurus	White-tailed kite	None	None			Rolling foothill and valley margins with scattered oaks and river bottoms. Also marshes near deciduous woodland. (Nesting sites).	Open grasslands, meadows, or marshes for foraging nearby isolated, dense-topped trees for nesting and perching.	Not likely to occur; though marginally suitable nesting habitat is present, there are no local records within five miles. May forage within and adjacent to project area.
Empidonax traillii extimus	Southwestern willow flycatcher	FE	SE	MSCP		Riparian woodlands in southern California.		Absent; suitable habitat is not present and there are no local nesting records within five miles.
Eremophila alpestris actia	California horned lark	None	SC			-	Short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Not likely to occur; though marginally suitable nesting habitat is present, there are no local records within five miles. May forage adjacent to project area.
Icteria virens	Yellow-breasted chat (N)	None	SC			Summer resident, inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forage and nest within 10 ft of the ground.	Absent; though there are occurrence records within five miles, the nesting habitat is not suitable within the project area.
Laterallus jamaicensis coturniculus	California black rail	None	ST, FP				Occurs in tidal salt marsh heavily grown to pickleweed. Also in freshwater and brackish marshes all at low elevations.	<b>Absent</b> ; outside of known range.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None	SE	MSCP		Coastal salt marshes, from Santa Barbara, south to San Diego County.	Nests in <i>Salcornia</i> on and about margins of tidal flats.	Absent; suitable habitat is not present and there are no local nesting records within five miles.

Scientific Name	Common Name	Federal Status	State Status	Other	CNPS Status	General Habitat	Micro Habitat	Potential for Occurrence
Plegadis chihi	White-faced ibis	None	SC	MSCP	Status	Shallow fresh-water marshes. (Rookery sites).	Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Absent; suitable habitat
Polioptila californica californica	Coastal California gnatcatcher	FT	SC	MSCP		Obligate permanent resident of coastal sage scrub below 2,500 ft in southern California.	Low, coastal sage scrub, in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Present; species has been recorded from within the immediate project area vicinity and there is suitable habitat present. Furthermore, species was observed during the field visit. Local records within five miles.
Rallus longirostris levipes	Light-footed clapper rail	FE	SE, FP	MSCP		Salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are dominant vegetation.	Require dense growth of either pickleweed or cordgrass for nesting or escape cover. Feed on mollusks and crustaceans.	Absent; outside of known range.
Sterna antillarum browni	California least tern (N)	FE	SE, FP	MSCP		Nests along coast from San Francisco Bay south to northern Baja California.	California breeder on bare, or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	<b>Absent</b> ; outside of known range.
Vireo bellii pusillus  Mammals	Least Bell's vireo (N)	FE	SE	MSCP		Summer resident of southern California. Inhabits low riparian growth in vicinity of water or in dry river bottoms, below 2,000 ft.	Nests placed along margins of bushes or twigs projecting into pathways, usually willow, <i>Baccharis</i> , mesquite.	Absent; though there are occurrence records within five miles, the nesting habitat is not suitable within the project area.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Antrozous pallidus	Pallid bat	None	SC	FSS BLMS		Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting	Not likely to occur; though marginal roosting habitat is present, there are no local records
						habitats with rocky areas for roosting.	sites. Arid, low elevations (<6,000 feet); roost in deep crevices in rock faces, buildings, or bridges.	
Chaetodipus californicus femoralis	Dulzura pocket mouse	None	SC			Open coastal sage scrub, chaparral and grassland.	Grass-chaparral edges.	May occur; suitable habitat is present and there are local records within five miles.
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	None	SC			Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	May occur; suitable habitat is present and there are local records within five miles.
Choeronycteris mexicana	Mexican long- tongued bat	None	SC			Desert canyons, arid mountain ranges.	Roosts by day in caves, mines or buildings	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Dipodomys stephensi	Stephen's kangaroo rat	FE	ST			Annual and perennial grasslands. Also found in coastal scrub and sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass, and filaree. Burrows into firm soils.	Not likely to occur; suitable habitat is present but there are no local records within five miles.
Euderma maculatum	Spotted bat	None	SC			Wide variety of habitats from arid deserts and grasslands to mixed conifer forests.	Feeds over water and along washes. Needs rock crevices in cliffs or caves for roosting.	Absent; no suitable foraging habitat and there are no local records within five miles.

Scientific Name	Common Name	Federal Status	State Status	Other	CNPS Status	General Habitat	Micro Habitat	Potential for Occurrence
	California mastiff	None	SC	BLMS	Status	Many open, semi-arid to	Roosts in crevices in cliff	Not likely to occur;
Eumops perotis californicus	bat	None	sc	BLIVIS		arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	faces, high buildings, trees and tunnels.	though there is suitable foraging habitat is present and there are local records within five miles, there is no suitable roosting habitat within the project area.
Lasiurus xanthinus	Western yellow bat	None	None			Found in wooded areas and desert scrub.	Roosts in foliage, particularly in palm trees.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Lepus californicus bennettii	San Diego black- tailed jackrabbit	None	SC				Coastal sage scrub habitats in southern California.	May occur; suitable habitat is present and there are local records within five miles.
Neotoma lepida intermedia	San Diego desert woodrat	None	SC			Coastal southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Nyctinomops femerosaccus	Pocketed free- tailed bat	None	None			Arid regions including pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats.	Rocky areas with high cliffs.	Not likely to occur; though there are occurrence records within five miles, the habitat is not suitable or is marginal within the project area.
Nyctinomops macrotis	Big free-tailed bat	None	SC			Lives in rocky areas of desert scrub or coniferous forests.	Roosts by day in crevices on cliff faces	Absent; no suitable foraging habitat and there are no local records within five miles.

		Federal	State		CNPS			Potential for
Scientific Name	Common Name	Status	Status	Other	Status	General Habitat	Micro Habitat	Occurrence
Perognathus	Pacific pocket	FE	SC			Inhabits the narrow	Seems to prefer soils of	Absent; no suitable
longimembris	mouse					coastal plains from the	fine alluvial sands near	foraging habitat and there
pacificus						Mexican border north to	the ocean.	are no local records
						El Segundo in Los		within five miles.
						Angeles County.		
Taxidea taxus	American badger	None	SC	MSCP		Grasslands, savannas, and	Friable soils, and	Not likely to occur;
						mountain meadows.	relatively open,	suitable habitat is present
							uncultivated ground.	but there are no local
							_	records within five miles.

## **Status Codes:**

N = Nesting, Nesting Colony or Rookery

W = Winter

<u>Federal</u> FT = Federal Threatened

FE = Federal Endangered FPE = Federal Proposed

Endangered

FPT = Federal Proposed
Threatened

FPD = Federal Proposed
Delisting

FC = Federal Candidate FD = Federal Delisted State

ST = State Threatened SE = State Endangered

SR = State Rare

SC = State Species of Special Concern

FP = State Fully Protected

Other

FSS = Forest Service Sensitive BLMS = Bureau of Land Management

Sensitive

CDFS = California Dept. of Forestry Sensitive

MSCP = San Diego County MSCP

**CNPS** 

1A = Presumed Extinct in California

1B = Rare, Threatened or Endangered in

California and elsewhere

2 = Rare, Threatened or Endangered in California but more common

elsewhere

3 = More information needed (usually taxonomically problematic)

4 = "Watch list." Limited distribution

## **Attachment 8**

Special-status Species Occurrence Map

